STIC-Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: /0/686,490C

Source: /FGO

Date Processed by STIC: 2/25/05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 4.2.2 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street. Alexandria, VA 22314

Revised 01/24/05

Raw Sequence Listing Error Summary

	10/686.4900
ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 707 00 07
	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS. WHICH WERE INSERTED BY PTO SOFTWARE
Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
-2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4 Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
SVariable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6Patentin 2.0 "bug"	A "bug" in Patentin version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, Patentin would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s)missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s)missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
Patentin 2.0 "bug"	Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid
-	00/00/2003

AMC - Biotechnology Systems Branch - 09/09/2003



11.

IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/686,490C

DATE: 02/25/2005 TIME: 10:06:06

Input Set : A:\PTO.SR.txt

Output Set: N:\CRF4\02252005\J686490C.raw

4 <120> TITLE OF 1 5 <130> FILE REFERENCE C> 6 <140> CURRENT AND C> 6 <141> CURRENT FILE 6 <160> NUMBER OF	PatentIn version 3.1: 185 unknown		furnay Sheet
15 <222> LOCATION:	(1)(885)	• • •	
	ORMATION: bacterial		STEETS .
	l aag gcc aac ggc att acc ct Lys Ala Asn Gly Ile Thr Le 5 10		48
23 ggc cat cgc cac	cat ccg tcc atg ctc ctc at His Pro Ser Met Leu Leu Il 25	t atg ggc ctg ggc ggc . e Met Gly Leu Gly Gly 30	96 .
27 cag tta atc gac	tgg ccc gag gag ttc atc cg Trp Pro Glu Glu Phe Ile Ar 40		144
31 ggc ttc cgg gta	atc tgt ttc gac aac cgc ga Ile Cys Phe Asp Asn Arg As 55	- 5-5 55555	192
35 aaa ctt gaa ggc	gtg aaa aaa ccg aac att gc Val Lys Lys Pro Asn Ile Al 70 75	a Arg Val Phe Leu Leu	240
	cta aag ccc agg gtg cct ta Leu Lys Pro Arg Val Pro Ty 85 90		288
	gtg ggg ctg atg gat gcc ct Val Gly Leu Met Asp Ala Le 105		336
47 cac gta gtt ggc	gtc tcc atg ggc ggc atg at Val Ser Met Gly Gly Met Il 120		384
51 gcg aag cac ggg	gag cgg gtg aaa tcc ctt ac Glu Arg Val Lys Ser Leu Th 135		432

DATE: 02/25/2005 TIME: 10:06:06 PATENT APPLICATION: US/10/686,490C

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Output Set: N:\CRF4\02252005\J686490C.raw

									•			•							
5	55	tcc	ggc	aac	ccc	cgc	atg	ccg	gcg	ccc	agg	ccg	cag	gtg	ctg	caa	aag		480
5	66	Ser	Gly	Asn	Pro	Arg	Met	Pro	Ala	Pro	Arg	Pro	Gln	Val	Leu	Gln	Lys	•	
5	57	145					150			4		155					160		520
5	59	ttt	atg	cgg	gtg	ccc	aag	agc	atg	gat	aag	gaa	gag	Egg	att	aaa	Tac		528
		Phe	Met	Arg	Val	165	гÀг	ser	met	Asp	170	GLU	GIU	пр	116	175	T Y L		
	51 53	220	++~	aaa	ctt		acc	acc	atc	aac		ccc	aaa	tta	gac		gag		576
- 6	33 34	Asn	Leu	Glu	Leu	Leu	Thr	Thr	Ile	Glv	Ser	Pro	Gly	Leu	Asp	Arg	Glu		
	55				180					185			•		190	_			
•	57	aag	ctg	gcc	tta	gac	gtg	agg	aag	agc	ata	gag	cgg	tgc	ctt	tgc	ccc ·		624 .
6	58	Lys	Leu	Ala	Leu	Asp	Val	Arg		Ser	Ile	Glu	Arg		Leu	Cys	Pro		
6	59			195					200					205	~~~	200	200		672
7	/1	gaa	ggc	acg	cag Gln	cgg	cag	ctg	gca	gcc	atc	CEG	Cag	age	Glu	Sor	Ara		072
		GIU	210	Thr	GIN	Arg	GIII	215	Ald	MIG	116	rea	220	Ser	GLY	Jer	ALG.		
	73	ata		cta	ctc	caa	caa		act	atc	ccc	acc		atc	atc	aσc	ggg		720
	16	Val	Lvs	Leu	Leu	Ara	Ara	Ile	Ala	Val	Pro	Thr	Leu	Val	Ile	Ser	Gly		
		225	-,-			_	230					235					240		
7	79	gcg	gaa	gat	ccc	ctc	ctg	ccg	tac	cag	tgc	ggc	cgg	gac	att	gcc	gac		768
8	30	Ala	Glu	Asp	Pro		Leu	Pro	Tyr	Gln		Gly	Arg	Asp	Ile		Asp		
	31					245		A. A			250			a+ =	~~~	255	~~		816
	33	cat	atc	ccg	gga Gly	gcc	cgc	Dho	gag	LAU	Tle	Glu	Glv	Met	Glv	His	Asp		010
	34 35	HIS	TTE	PIO	260	MIG	Arg	File	GIU	265	TTE	GIU	Gry	1100	270				
		att	ccc	gag	cgg	cac	atc	ccc	cqq		att	gag	ctc	atc	gcc	ggg	cac		864
8	38	Ile	Pro	Glu	Arg	His	Ile	Pro	Arg	Leu	Ile	Glu	Leú	Ile	Ala	Gly	His	•	
	39			275					280					285					005
		_		_	gcg		_	taa											885
		Ala		Ala	Ala	GIU	AIa												
_	93	/21 C	290	o ti	O NO:														
															•				
9	98	<212	2> T)	PE:	PRT	•					51	1				1	ator		
9	99	<213	3≥ OI	RGAN:	ISM:	unkı	nown		100	0	4	Lα	ON	M.	UA	Kas	avoi		
> 1	102	2 /22	20> <i>}</i> 1	EAT	JRE:			/	2	1.	' (7"	.	, •	<i>(-)</i>				
> 1	102	2 (22	23>/9	THE	RINI	ORM	ATIO	4: ⊱	حاض	1==-	1 cm	V						•	
> 1	102	2 <40	20> 2	2			. 87.	. 3	- 61	т1	o mb	- TO	. CI	. T.,	r G1	n 61	u Gln		
4	LUS	Met	Ala	a GII	a va.	г ту	3 Ale	a As	n GI	утт	e in 10	T De	u GI	u iy	r Gr	15	u 01		
) 1 } (1)	, Hi	a Arc	r His	. His	s Pro	o Se	r Me	t Le			e Me	t Gl	y Le		y Gly		
	109		, ,,,	, ,,,,	20	, ,,,,,,				25					໌ 30				
	112	Glr	ı Leı	ı Ile	e Ası	Tr	Pro	o Gl	u Gl	u Ph	e Il	e Ar	g Gl	y Le	u Al	a Gl	u Arg		
:	113	3		· 35					40					45					
:	116	G Gly	, Phe	e Arg	g Val	l Ile	e Cy:		e As	p As	n Ar	g As			y Le	u Se	r Thr		
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			s Lei	ı Glı	ı Gly	y Va.		s Ly	s Pr	o As	u II			y va	T LU	E T6	u Leu 80		
		L 65	. 60.	- Mai	- 61.	, T.c.	70	e D~	~ A ~	a V≃) Pr	75 ጥህ		r Le	11 A.9	n As	p Met		
	129		3 261	L Mei	L 61)	у <u>пе</u> . 85	r ny:	o FL	O WI	y va	90					95			
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RAW SEQUENCE LISTING DATE: 02/25/2005 PATENT APPLICATION: US/10/686,490C TIME: 10:06:06

Input Set : A:\PTO.SR.txt

Output Set: N:\CRF4\02252005\J686490C.raw

	Ala	Leu	Asp	Thr 100	Val	Gly	Leu	Met		Ala			Ile	Glu 110	Ser	Thr
132 133		Val	Val 115	Gly	Val	Ser	Met		Gly		Ile	Ala	Gln 125	Ile	Leu	Gly
136 137		Lys 130	His	Gly	Glu	Arg		Lys				Leu 140	Met	Ile	Thr	Ser
	Ser 145	Gly	Asn	Pro	Arg			Ala	Pro	Arg		Gln				Lys 160
144 145			Arg			' r As	Ser	Met	Asp			Glu		Ile	Lys 175	Tyr
	Asn		Glu	Leu 180	Leu	Thr	Thr	Ile	Gly 185	Ser	Pro	Gly	Leu	Asp 190	Arg	Glu
152 153	_	Leu	Ala 195	Leu	Asp	Val	Arg	Lys 200	Ser			Arg	Cys 205	Leu	Cys	Pro
156 157		Gly 210	Thr	Gln	Arg	Gln		Ala			Leu	Gln 220	Ser	Gly	Ser	Arg
	Val 225	Lys	Leu	Leu	Arg		Ile		Val	Pro	Thr 235	Leu	Val	Ile	Ser	Gly 240
	Ala		Asp	Pro	Leu 245	Leu	Pro	Tyr		Cys 250			Asp	Ile	Ala 255	Asp
168 169	His	Ile	Pro			Arg		Glu	Leu 265	Ile	Glu	Gly	Met	Gly 270	His	Asp
172 173		Pro	Glu 275	Arg	His	Ile	Pro	Arg 280	Leu	Ile	Glu	Leu	Ile 285	Ala	Gly	His
176 177	Ala	Ala 290	Ala	Ala	Glu	Ala	٠			٠					•	

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/686,490C

DATE: 02/25/2005 TIME: 10:06:07

Input Set : A:\PTO.SR.txt

Output Set: N:\CRF4\02252005\J686490C.raw

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Use of <220> Feature (NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104,pp.29631-32) (Sec.1.823 of new Rules)

Seq#:2

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/686,490C

DATE: 02/25/2005 TIME: 10:06:07

Input Set : A:\PTO.SR.txt

Output Set: N:\CRF4\02252005\J686490C.raw

L:6 M:270 C: Current Application Number differs, Replaced Current Application No

L:6 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:102 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:2, <213>

ORGANISM: unknown

L:102 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:2, <213>

ORGANISM: unknown

L:102 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:2,Line#:102